

Texas Department of Information Resources



**Business Analytics & Reporting Pilot
Statement of Work**

**Catapult Systems, LLC.
DIR-SDD-2039**

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

Contents

1.	Introduction.....	4
2.	Project Goals.....	4
3.	Scope and Solution Requirements.....	5
3.1	BAR Features and Capability Requirements	6
3.2	BAR Operational Requirements	6
3.3	Technical Services	8
3.4	Data Protection Controls	8
3.5	Accessibility Requirements	9
3.6	Project Manager.....	9
3.7	Vendor Staff Requirements.....	9
3.8	Project Plan	9
3.9	Training.....	9
3.10	Testing.....	10
3.11	Additional Services	10
3.12	Status Meetings	10
3.13	Communications Plan	11
4	Deliverable Requirements.....	11
4.1	Deliverable Schedule	11
5.	Catapult Methodology.....	13
5.1	Solution Overview.....	13
5.2	Components of Cortana in DIR BAR Solution	13
5.3	Catapult's Delivery of Technical Services.....	14
5.4	SharePoint Project Workspace.....	15
5.5	Catapult Project Manager.....	16
5.6	Risk Management.....	17
5.7	Communications	17
5.8	Catapult Provided Training.....	17
5.9	Assumptions	19
6.	Glossary.....	20
7.	Period of Performance	20
8.	Invoices.....	21
9.	DIR/Vendor-Furnished Equipment and Work Space.....	21

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

10. DIR Point of Contact 21

11. Pricing 21

 11.1. Deliverables 22

 11.2. Hourly Rates 22

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

1. Introduction

The terms of Contract DIR-SDD-2039, deliverables-based information technology services (DBITS), shall apply to this Statement of Work (SOW).

This SOW outlines the deliverables and services to be performed by Catapult Systems, LLC. ("Catapult") for the Texas Department of Information Resources (DIR) in implementation of a shared Business Analytics and Reporting (BAR) platform supporting five (5) pilot agencies and shall include use of software and services that are purpose-built for BAR functions. Pilot agencies include DIR, Commission on State Emergency Communications, Department of State Health Services, Texas Alcohol and Beverage Commission, and Texas Department of Licensing and Registration.

This document also captures the current understanding of the scope, describes the approach, and contains details of the activities and responsibilities for both parties in accordance with the deliverables and associated tasks enumerated in the SOW for Business Analytics and Reporting Pilot dated December 30, 2015 as mutually amended herein.

2. Project Goals

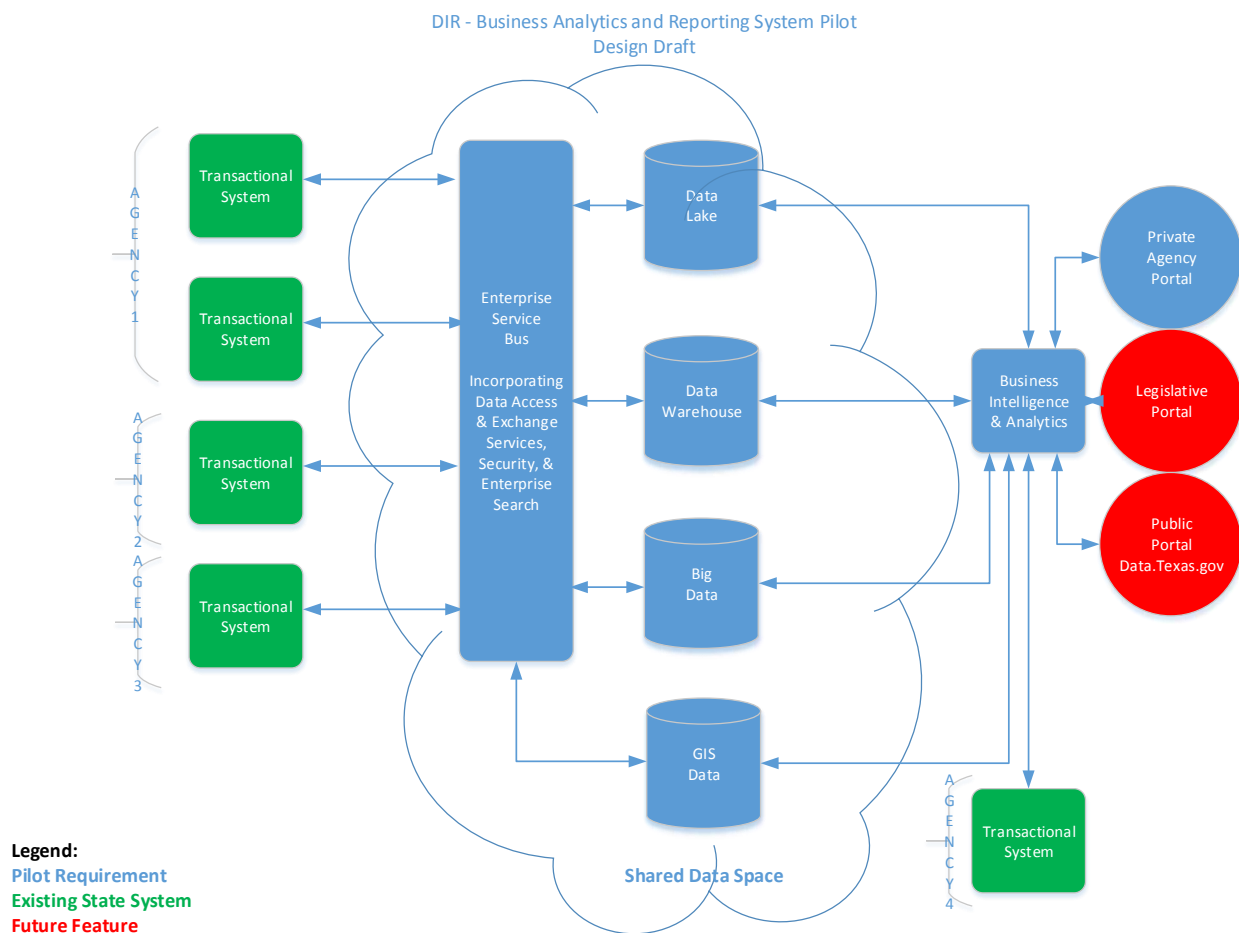
1. Implement the tools and processes needed to support BAR practices for five (5) pilot agencies. Projected schedule: The pilot project begins in April 2016, solution and technical services are acquired in April 2016, and the pilot provides recommendations by October 2016. Specific implementation goals include, but are not limited to:
 - a. Populating the BAR with data from one (1) to two (2) agency applications per pilot agency. Completing this initial data population within two (2) months of BAR platform setup.
 - b. Piloting the BAR across agencies of varying size.
 - c. Providing analytical, dashboard and reporting capabilities to business users to provide better insight into agency data to improve executive decision making.
 - d. Providing log-ins for up to 30 pilot agency staff.
2. The DIR Project Team will review the viability of the pilot, as implemented, against the business requirements identified in this Statement of Work and legislative intent. The DIR Project Team will develop recommendations related to the development of a full program service offering through a separate request for offer and made available to any state agency, with implementation of changes based on lessons learned, or a recommendation to close of the program. Specific project goals include, but are not limited to:
 - a. Identifying improvements and components to retain: software services, governance, model, etc.
 - b. Creating an actionable guide, documentation standards, and templates for implementing a BAR service program that can serve small, medium or large state agencies.
 - c. Documenting the effectiveness of the pilot against the project goals and objectives.

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

- d. Identifying the level of effort required by the varied sized agencies to participate in this pilot. DIR will use this information as a basis for recommendations regarding full program implementation.
- e. Identifying viable chargeback mechanisms to support a full program service offering.

3. Scope and Solution Requirements

1. The pilot solution shall, to the greatest extent possible, enable the features and capabilities shown in Section 4.1, BAR Features and Capability Requirements, and directly provide the associated supporting functions.
2. The following diagram provides a representation of how DIR envisions the structure of the platform for the BAR pilot and potential future features.



Note: Although the diagram displays three access portals (“Private Agency”, “Legislative Portal”, & “Public Portal-Data.Texas.gov”), due to the limited time frame for implementing the BAR pilot, only a “Private Agency” portal will be required as part of the Respondent’s proposed solution. A potential solution could consist of a single portal with role based security implemented to provide the required functionality.

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

3. The Vendor shall provide integration services required to implement the Vendor's BAR configuration, including but not limited to data loading.
4. The Vendor shall provide end user training for the BAR solution, as detailed in Section 3.9, Training, and Section 5.9, Catapult Provided Training.
6. During the course of the pilot, the Vendor shall collaborate with DIR staff to document best practices, considerations, observed metrics, and the lessons learned from the pilot, which will serve as input into the development of DIR's final legislative report.
7. A kickoff meeting shall be held at a location and time mutually determined by DIR and the Vendor, where the Vendor and its staff will be introduced to the DIR Project Team.

3.1 BAR Features and Capability Requirements

The BAR solution shall provide the following functions:

1. Dashboarding: Create a user-friendly, intuitive, interactive and user customizable interface that makes use of rich visualizations to organize and present information to the end users.
2. Search Capability: Allow users to easily search data, provide drill down and categorization functions, and provide the ability to export the search-related data.
3. Administration: Centralized console to manage BAR portal administration, which will provide management with metrics and reports to provide insight into usage, resource utilization, security, and related type(s) of BAR administrative activities.
4. Alert Capability: Ability to generate email and/or text notifications and alerts to designated users when predefined conditions are met.
5. Self-Service: Users are able to interact with data, perform custom analysis, and find answers on their own.
6. Text Analytics: Ability to perform text analytics on unstructured data.
7. Geospatial Analysis: Empower users to perform geospatial analysis such as thematic mapping, clustering, radius search, etc.
8. Excel Integration: BAR-Excel integration that allows content and functionalities to be imported into Excel for further manipulation.
9. Forecast and Statistical Analysis: The ability to create scenarios and/or statistical models to predict future outcomes.
10. Data Warehouse Automation: Provide that data warehouse/big data/data lake are created automatically to accelerate the preparation for analytics.
11. Connections to Big Data: The ability to connect to popular Big Data sources, e.g. Hadoop.
12. Portals: Capability of providing multiple secure portals for different user types, including agency users, legislative users, and general public users, and providing access-based or role-based security.
13. Enterprise Service Bus (ESB): The system shall include an ESB to provide architecture consisting of a set of rules and principles for integrating numerous applications to communicate via a bus-like infrastructure. DIR is relying on the expertise of the Vendor to guide and educate DIR in the logical flow of data capability within the ESB function.
14. Mobile Capability: Allow information users to access BAR content in real time via mobile devices such as tablets or smart phones.

3.2 BAR Operational Requirements

The BAR solution shall meet each of the following operational requirements:

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

1. Software shall support a Software as a Service (SaaS) delivery model
2. Provides multi-tenancy:
 - a. Same platform structure supports multiple agencies
 - b. Common platform to provide consistent security across agencies
 - c. Clear lines of logical separation are maintained between agency tenants supporting varying levels of access to data (e.g., access by role and group to a data strata based on agency program area, agency, or enterprise access)
3. Backup and recovery:
 - a. All backup and disaster recovery will be provided by the Vendor. Data hosted off-site is accessible 99.0% including all planned and unplanned downtime. Planned downtime must be coordinated with the DIR Project Manager (DIR PM).
 - b. All configuration information is backed up on a daily basis. If restoration is required, the Vendor shall, upon notification, make full restoration based on the last successful backup within five business days.
4. Storage:
 - a. Content storage, including backup data, must be restricted to the continental United States.
 - b. Agency data under the protection of the Vendor (under its care, custody and control) must be returned to the respective Agency upon notice, with the data/metadata transferred in Comma Separated Value (CSV) file format that can be recovered for use within a Structured Query Language (SQL) compatible database environment. Optionally, DIR retains the right to receive the BAR project data in a database table format such as Microsoft SQL Server.
5. Security: Vendor shall provide:
 - a. Secure authentication, authorization, access, and audit capability
 - b. Isolation of content and configuration based on user, groups, and agency
 - c. Support for third party directory services authentication
 - d. Environmental Security
 - e. Physical site security
 - f. Computer software security
 - g. Data access and storage security
 - h. Client/user security
 - i. Telecommunications security, and
 - j. Network security
6. System configuration:
 - a. Users are assigned the ability to perform configuration based on designated levels of access.
 - b. Vendor provides base system management.
7. Implementation:
 - a. Implementation services are described below in Section 3.3 Technical Services
8. Report concurrent usage and total users for each level of access, functionality, and license type, both across the BAR enterprise platform and within each logical agency partition.

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

9. During project close out and at the direction of DIR, Vendor will provide certification that all data, including backup data, belonging to DIR and agencies has been deleted and purged.

3.3 Technical Services

The Vendor shall provide technical services to implement and configure the solution. DIR also requires technical support to establish and verify data import and connectivity functions between various types of Texas agency data stores (e.g., standalone databases, CSV files).

The BAR pilot may include disparate data systems and data types. Technical services will include identifying best practices supporting BAR governance and integration of those practices into the solution in the forms of:

1. Self-service reporting
2. Data warehouse automation
3. Forecasting statistical analysis
4. Implementation of cost structures (e.g., costs for application maintenance, development, and operations)

General descriptions of anticipated required technical services include but are not limited to:

1. In conjunction with DIR staff, establish a governance model for DIR's written approval
2. Correlate requirements with best practices for the Vendor's solution
3. Document resulting governance policies and practices
4. Implement software environment and configure to meet the BAR Team's project requirements
5. Facilitate data structure creation
6. Define data model
7. Define data ingestion processes
8. Develop data integration methods and processes
9. Establish and configure multi-tenancy security model
10. Configure reports and dashboards
11. Provide DIR with ongoing reporting of time, by categories of work, indicating the levels of effort required to provide Technical Services during the engagement
12. Contribute to lessons-learned material for use by DIR in the development of the final report for the BAR Pilot

3.4 Data Protection Controls

While the data to be stored in this system will not contain Personally Identifiable Information (PII), it shall be considered confidential and sensitive. To protect the assets of the state (data), the Vendor will be required to ensure data protection controls comply with the requirements of Texas Administrative Code § 202, Information Security. DIR has the capability to ensure compliance through audit of the environment. All direct participants will abide by Confidentiality provisions of the DIR Contract No. DIR-SDD-2039. Should an additional Non-Disclosure Agreement be required, Catapult and Texas DIR will execute one accordingly.

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

3.5 Accessibility Requirements

To the extent documented by the Voluntary Product Accessibility Templates (VPATs) submitted by the Vendor, the BAR services provided shall meet the accessibility requirements as defined in U.S. Section 508 Standards for Electronic and Information Resource (EIR) and Web Content Accessibility Guidelines (WCAG) 2.0.

3.6 Project Manager

Vendor shall designate an individual and backup to perform the tasks of Vendor's Project Manager (PM). Vendor's PM and backup PM will henceforth be considered synonymous. The Vendor's PM will serve as the main point of contact for DIR. Vendor's PM shall be responsible for communicating with DIR's PM on all issues related to the services and to discuss and resolve service issues. Vendor's PM will receive guidance and direction from the DIR PM. Vendor's PM shall work closely with DIR's PM to make certain that adequate resources are applied to achieve successful completion of the services. Vendor's PM, at a minimum, will respond to day-to-day problems, manage issues, construct project plans and timelines, provide status reports, participate in weekly status meetings, and manage personnel resources.

Vendor shall not change the PM or backup without at least 30 days prior notification to DIR. If a change is required, the Vendor shall propose replacement staff for DIR's approval in accordance with Section 3.7, Vendor Staff Requirements. Any replacement must be of equal or increased experience and qualifications.

3.7 Vendor Staff Requirements

Key Personnel may not be removed from the project without DIR's written permission.

In the event Vendor needs to add or substitute personnel during the term of the Contract, Vendor must notify the DIR PM in writing requesting the change. For any additional or replacement personnel or for any personnel who may be deemed to be unacceptable by DIR, Vendor shall propose, for DIR's approval, replacement personnel of similar or increased experience and qualifications. DIR reserves the right to reject any proposed replacement personnel. The Vendor may be required to provide a resume and/or any other information necessary for DIR to make a determination of the acceptability of the proposed personnel.

3.8 Project Plan

The Vendor shall develop a Project Plan for all areas associated with the BAR Pilot for written approval by DIR. The Project Plan shall specify, to the greatest degree possible, the activities that are to be undertaken, including a step-by-step timetable and the names or titles of the Vendor's staff involved in each step. This shall include all resource requirements necessary to successfully complete the project. Resource requirements shall include any required input from DIR staff and an estimate of the amount of DIR staff time required.

3.9 Training

Vendor shall be responsible for developing the training materials for the Vendor's BAR platform

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

and conducting the training of the pilot group's end users of the system.

3.10 Testing

DIR will require testing of the Vendor's solution prior to full implementation of the BAR Pilot. Vendor's subject matter experts who are primary to implementation shall develop a test plan for those items that they were involved with deploying. Pilot agencies will provide real data from their agencies' environments for analysis purposes throughout the pilot. Prior to conducting testing, DIR requires that the Vendor develop a Test Plan for DIR's written approval based on input from the DIR Project Team.

3.11 Additional Services

DIR anticipates that the need may arise for the Vendor to perform additional services under this contract. Any additional services must be directly related to the awarded scope and intent of the SOW.

In the event that additional services are required during the term of the contract, DIR will provide written notice to the Vendor describing the additional services required including as applicable the purpose, scope, timeline and any other unique requirements, constraints, and assumptions for the requested service. The Vendor and DIR will mutually determine a timeline for the Vendor to provide a work plan and pricing for the additional services. Any additional services shall be quoted as a deliverables based IT service at a firm fixed price inclusive of any and all additional fees or charges. Pricing for labor hours associated with any additional services shall be based upon the hourly rates specified in Section 11.2, Hourly Rates. A request for pricing does not constitute a notice to proceed. If DIR chooses to proceed, DIR will issue a written addendum to the contract for signature by DIR and the Vendor authorizing the additional services.

3.12 Status Meetings

Status meetings will be held at DIR to update progress made, seek input from DIR, and to ensure that work is proceeding in the desired direction. Any issues affecting this project shall be addressed at these meetings. Initially, it is intended that these meetings will be held weekly. The frequency of these meetings may be altered to fit the then current need. As a minimum, the Status Meetings shall include:

1. Agenda - Vendor shall provide a written agenda to DIR project management at least 24 hours prior to meeting. This will allow DIR project management the opportunity to include any additional topics.
2. Minutes - Vendor shall keep minutes of each meeting and provide a written copy to DIR PM within two business days of the meeting. As a minimum, minutes shall address topics discussed, issues raised, and intended resolution of those issues.
3. Status Reports - Vendor shall provide weekly written status reports to the DIR PM. The written status reports shall address Tasks Completed, Tasks in Progress, Work to be Initiated During the Next Period and Issues Requiring Management Attention. Issues Requiring Management Attention shall include, but not be limited to, any problems that may delay performance along with proposed corrective action, any failure of Vendor or DIR to perform, any delay of vendor or DIR in performing, and any inadequacy in the performance of Vendor or DIR.

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

In the event the Vendor fails to timely specify in writing, within the applicable weekly reporting period, an Issue Requiring Management Attention for the Weekly Status Report, Vendor shall not be entitled to rely upon such Issue as a purported justification for either (1) claiming Vendor is entitled to receive any amount (including, without limitation, damages or additional charges arising out of a breach by DIR of a DIR obligation) with respect to Vendor's obligations hereunder in excess of those previously agreed to; or (2) failing to complete any of Vendor's obligations hereunder. Submission of the above referenced status reports shall not alter, amend or modify Vendor's or DIR's rights or obligations pursuant to any provision of the Contract.

3.13 Communications Plan

With the exception of Status Meetings, all other communications to all parties (e.g., Vendor, Project Team, leadership) on the status of the project, features provided, or timeline adjustments is solely the responsibility of the DIR PM. Vendor will provide status updates on tasks assigned to the designated DIR PM.

4 Deliverable Requirements

All deliverables must comply with the following:

- Deliverables must be provided on the dates specified. Any changes to the delivery date must have prior approval (in writing) by the DIR PM or designee.
- All deliverables must be submitted in a format approved by the DIR PM.
- If the deliverable cannot be provided within the scheduled time frame, the Vendor is required to contact the DIR PM in writing with a reason for the delay and the proposed revised schedule. The request for a revised schedule must include the impact on related tasks and the overall project.
- A request for a revised schedule must be reviewed and approved in writing by the DIR PM before being placed in effect. Contract Terms and Conditions may dictate remedies, costs, and other actions based on the facts related to the request for a revised schedule.
- DIR will complete a review of each submitted deliverable within five (5) working days from the date of receipt. DIR will notify the Vendor in writing of any deficiencies in the deliverable that must be corrected or will provide written acceptance of the deliverable. For any deliverable for which payment will be made by DIR, the Vendor may invoice for that deliverable after written acceptance by DIR.

4.1 Deliverable Schedule

The due dates shown below are intended for planning purposes and are based on a project start of 4/6/2016. Changes to the project start date will require some adjustment of deliverable due dates. Vendor may work with the DIR PM and Pilot Agencies to propose alternate dates for completion of the Deliverables provided the BAR platform is decommissioned no later than September 30, 2016 and DIR receives approximately four months of experience using the BAR Pilot services.

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

Del. #	Item Name and Description	SOW Section	Due Date
1	Project Plan/Schedule	Entire SOW	4/18/16
2	Base Architecture Documentation Detailed architectural documentation of BAR infrastructure and comprehensive list of required components, to include associated costs for said components and services necessary to perform this deliverable. This documentation will be updated at multiple points during the project including: <ol style="list-style-type: none"> 1. After the Pilot Agency BI Jumpstarts are Complete 2. During the Pilot Sprints as new Data Artifacts are created 3. Prior to Pilot Environment Decommissioning 	3	4/19/2016
3	Initial BAR Platform Ready for Testing A built and implemented BAR platform with a Test Plan ready to run. It is anticipated that changes to the platform will be made as part of Sprint activities and documented in the Base Architecture Document	3.3	4/15/2016
4	Initial Agency Data Upload Complete Successful load of the Initial set of Pilot Agency data into the BAR Pilot platform. Other data may be loaded into the Pilot platform as required during the Pilot Sprints.	3	4/15/2016
7	Initial Pilot Agency Training Initial training will be eight (8) hours of training allocated to each of the five (5) Pilot Agencies for a total of 40 hours.	3.9 and 5.8	5/5/2016
8 - 16	Pilot Sprint Support and Training Catapult will provide BI Development and Training support to the Pilot Agencies throughout the project. Each of the nine (9), two-week sprints will include supported planning, data artifact creation, review and training activities.	3.9 and 5.8	Every two weeks starting 5/19/2016 and ending 9/8/2016
5	BAR Lessons Learned and Governance Final Report Catapult will collaborate with & provide insight to DIR staff developing the final report on the pilot on best practices, lessons learned, metrics observed, and other aspects of the BAR including the development of the BAR governance model. Activities include Initial Planning, in-project Governance Activities and Final Sprint to create report.	3.3	9/22/2016 – This date can be moved earlier if necessary.

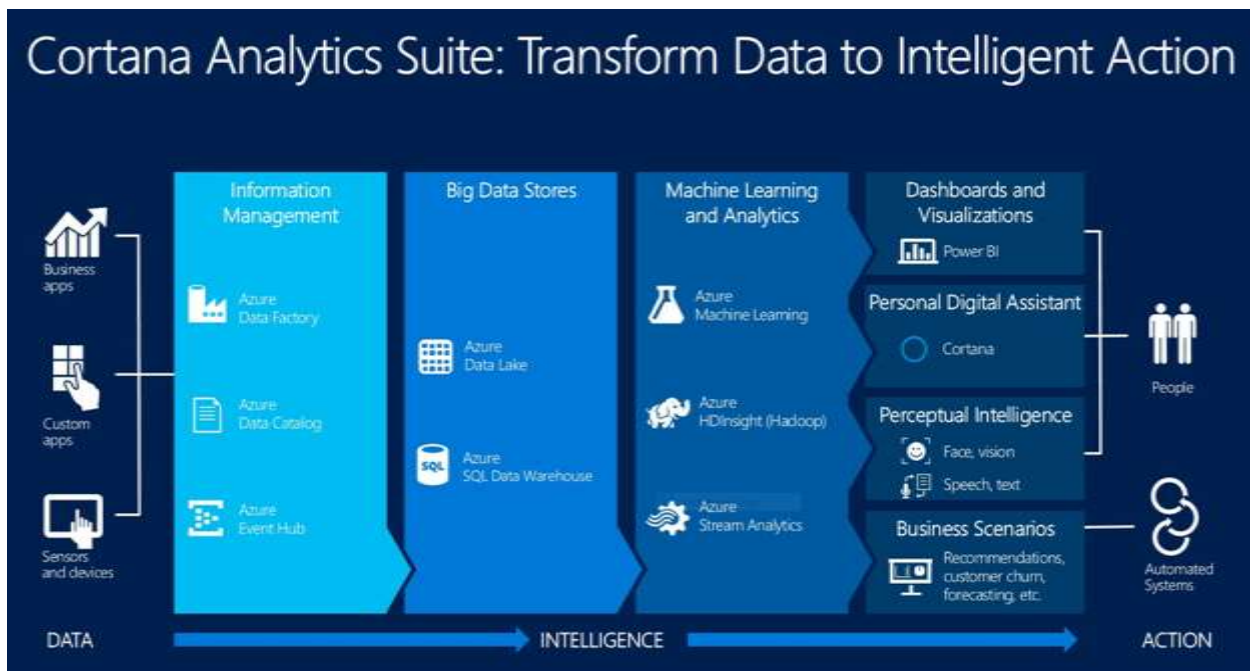
**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

Del. #	Item Name and Description	SOW Section	Due Date
6	Decommissioning of the BAR platform and Data Purge Catapult will decommission environment and verify that all data has been purged.	3.2	9/28/2016

5. Catapult Methodology

5.1 Solution Overview

Catapult's architecture for the DIR BAR platform will be provided by elements of Microsoft's Cortana Analytics Suite. The following diagram depicts the components of Cortana and the capabilities it provides in common data analysis scenarios.



5.2 Components of Cortana in DIR BAR Solution

Catapult shall provide the following components as part of the Cortana Analytics Suite:

1. Azure Data Catalog – To provide a cloud-based service into which data sources can be registered.
2. Azure Data Factory (ADF) – To provide a secure data movement service in the Azure cloud used to easily ingest data from multiple on-premises and cloud sources and capable of connecting to on-premises sources with an authorized data management gateway and ingesting the data.
3. Azure Data Lake (ADL) – To provide an enterprise-wide repository to store data of all

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

sizes, formats and speeds that have both present and future value.

4. Azure SQL Data Warehouse – To provide state of the art query performance
5. Azure HDInsight – To provide big data analysis.
6. Azure Stream Analytics – To provide real-time analytic computations on data streaming from devices, sensors, web sites, social media, applications, infrastructure systems, etc..
7. Azure Machine Learning – To allow for the creation and deployment of predictive models as analytics solutions.
8. Power BI – To provide a suite of business analytics tools to analyze data and build and publish reports. Catapult shall provide up to thirty (30) PowerBI Pro licenses as needed to conduct the BAR pilot. The PowerBI Pro licenses will be provided at no additional cost to DIR or the pilot agencies.

5.3 Catapult's Delivery of Technical Services

1. Catapult shall employ its A3 Methodology in conducting the BAR Pilot project. The A3 Methodology is comprised of:
 - a. Technical Delivery Approach that focuses on the process of delivery, testing, and quality assurance enabling the velocity of deliverables to scale up and down predictably and efficiently while retaining quality in delivery.
 - b. Governance and Data Management Maturity utilizes components of the CMMI Institute's Data Management Maturity (DMM) model in Catapult's governance and management process thereby aligning the A3 governance and maturity model with industry terminology and categorization to practices.
2. Catapult's A3 BI Methodology shall be employed enabling the Pilot agencies to rapidly realize their Enterprise BI Strategy via an Agile, Accurate, and Accelerated methodology.
3. Catapult shall employ its A3 BI Jumpstart to develop an actionable roadmap to support analytical goals and data needs of a particular agency, program, or business unit. A major goal of this effort shall be to develop the guiding themes for the analytical needs, the epics to support the themes, and the user stories that will support the high priority analytical epics. Catapult shall also generate the initial test and quality plan at this juncture. For clarity, the following terms shall be defined as:
 - Theme: A top level objective that may span many work efforts and projects. Themes may be broken into sub-themes, but will be no more granular than an epic. Themes are used to drive alignment across the organization and to communicate direction
 - Epic: A means to group multiple related user stories.
 - User Story: a user story is one or more sentences in everyday or business language of the end user or user of a system that captures what a user does or needs to do as part of his or her job function.

Common Outputs of the Jumpstart shall include:

- a. Vision Scope Document

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

- b. Test Plan
 - c. Capability Mapping Matrix
 - d. Capability Mapping Matrix of analytical features, data, master data components, reports and other data artifacts
 - e. Prioritized Backlog of analytical features, data, master data components, reports and other data artifacts
 - f. Prioritized Backlog of analytical features, data, master data components, reports and other data artifacts
 - g. Data Use Survey
 - h. Backlog of process improvements
4. Catapult shall utilize Agile Sprints (iterations) during the determination of requirements, prototype, design, and build. Each Sprint represents the timeline under which the cross functional teams conduct the work. The cross-functional team shall consist of, at a minimum, the development and operations IT teams and the business users requesting the work (i.e., stakeholders, product manager, business users). Sprints may last between one and four weeks, with the typical Sprint lasting two weeks.

Each sprint/iteration shall be designed to provide maximum flexibility to business stakeholders in determining the priority of what assets they need delivered. At the end of each sprint, the technical delivery team shall demonstrate and validate the artifacts with the business stakeholders present. Test cases shall be executed and logged as outlined in the Test Plan. Sign-off for the components requested within Sprint shall occur during the end of sprint meeting.

Outputs of an A3 Sprint/Iteration may include:

- a. Designed, developed, and deployed data integrations
- b. Designed, developed, and deployed data models
- c. Designed, developed, and deployed predictive models
- d. Dashboards and self-service reporting portals
- e. Reports and self-service reporting portals
- f. Documented lessons learned and opportunities for improvement and best practices
- g. Security models
- h. Portal configuration and development
- i. Automation and deployment scripts
- j. Test scripts, test executions, and documented test results
- k. Update(s) where necessary to Test Plan and Quality Plan

5.4 SharePoint Project Workspace

Catapult shall establish a SharePoint Project Workspace within their environment. This SharePoint site shall serve as a project extranet and allow sensitive materials to be stored and shared between both Catapult and a controlled group of Pilot participants, such as key project stakeholders, tech teams, or advisory boards. The SharePoint site shall hold the project:

- a. Schedule
- b. Calendar
- c. Contact List
- d. Meeting Agendas and Notes (Minutes)
- e. Weekly Status Reports
- f. Risk Log

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

- g. Issue Log
- h. Project Backlog
- i. Acceptance Criteria
- j. Initial Project Requirements
- k. Change Log
- l. Draft and Submitted Change Requests
- m. Presentations
- n. Working Documents
- o. Accepted/Final Documents
- p. Training Materials

5.5 Catapult Project Manager

The Catapult PM shall work with the DIR PM to coordinate the staffing and scheduling for all project activities and assist with all of the deliverables and site deployments for the project. Other responsibilities for the Catapult Project Manager shall include, but are not necessarily limited to:

1. Creation and timely (weekly) maintenance of a detailed project plan to be stored in the DIR BAR Project Site
2. Works as the Scrum Master and maintains Action Item (Task) Tracking which shall be maintained in the DIR BAR Project Site
3. Support for the creation and acceptance of the project deliverables to be maintained in the DIR BAR Project Site
4. Tracking Issues and Risks. Issue and Risk Logs shall be maintained in the DIR BAR Project Site
5. Change request creation and management. A Change Log shall be maintained in DIR BAR Project Site and Draft and Approved Change Requests shall be stored in the Project Library
6. Requirements tracking. Requirements shall be tracked in SharePoint during the design phase and then moved to the development repository.
7. Communication and Coordination with DIR and Catapult project staff. In addition to regular meetings and onsite communication with the DIR team, Catapult shall provide an Announcement List and Discussion Board in DIR BAR Project Site.
8. Conducting weekly status meetings and Sprint Reviews with the DIR PM and Pilot Agency teams. Catapult shall establish a meeting site for the weekly meetings in the DIR BAR Project Site.
9. Creating weekly Status Report for DIR PM. The Project Schedule and Weekly Status Reports will be stored in the DIR BAR Project Site and include:
 - a. Project Summary
 - b. Current Period Completed Tasks
 - c. Next Period Planned Tasks
 - d. Schedule Milestone Dates and Status of each
 - e. Current Risks & Issues Summary
 - f. Change Requests
 - g. Cost Summary
10. Conducting Monthly Stakeholder review – The Catapult PM shall create and conduct a monthly presentation that shall be stored in the DIR BAR Project Site.
11. Managing Technical resources and coordinating with DIR and Pilot Agency technical staff. Collaboration shall be facilitated via meetings and onsite communication as well as a shared Task List in the DIR BAR Project Site.
12. Attend and provide updates to DIR and Pilot Agency Core Management Team (CMT), DIR

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

- Executive Steering Committee (ESC), or other meeting(s), as requested.
13. Providing a single point of contact for the project. The Catapult PM shall maintain a Project Contact List in the DIR BAR Project Site.
 14. Assisting in creating the Final Project Report. The Final Report will be based on data and artifacts from the DIR BAR Project Site and will tie in with a review of the project site as the project repository and base for future deployments.
 15. Working with DIR staff to complete the Project Pre-Closeout Checklist
 16. Managing Project financials and invoicing

5.6 Risk Management

Catapult shall utilize a collaborative approach to risk management. All stakeholders and project team members shall be invited to participate in identifying potential risks and developing appropriate mitigation strategies. Catapult project managers shall track each risk and its related actions in a Risk Management Plan. During status meetings, Catapult and DIR staff shall periodically review the plan and the risk dispositions and action status shall be monitored.

5.7 Communications

Catapult shall work with DIR and the Pilot Agencies to create a Communication Plan that outlines how Catapult staff will establish a reliable means of assuring visibility and co-operation by communicating status and news about the project to appropriate stakeholders. The Communication Plan shall identify the processes, methods, and tools required to ensure timely and appropriate collection, distribution, and management of project information for all project participants.

5.8 Catapult Provided Training

Training for the Pilot shall be provided to DIR and Pilot Agencies in stages. The first training/learning opportunity for participants shall be during the Pilot Agency Jumpstarts. Included in the Jumpstart agenda shall be a review of the platform functionality and capabilities to help frame the broader discussions about the Pilot Agencies' current and future uses of data. The Jumpstart workshops are intended to help define the Initial Base Architecture of the BAR Platform. Based on the Jumpstart workshops, DIR and Pilot Agency staff have access to the comprehensive set of materials presented during the training on the general capabilities and any limitations of the Pilot platform. Classes will cover all components of the intended BAR platform. Materials presented in these sessions will be made available to all participants.

Training shall consist of both cross-role and role specific training. Hands on or shoulder to shoulder training opportunities may be provided during Platform setup and Sprint development and will be role specific for Azure BAR Platform Administrators and Business Intelligence Developers.

Initial or Pre-Pilot training and Sprint training sessions on the Analytics and Reporting tools will be tailored for:

- Program Analysts
- Data Analysts
- Program Directors
- Agency Directors

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

1. During Platform Configuration and Testing, there shall be opportunities for DIR and Pilot Agency staff to work with the Catapult team if the staff are available during the time when the platform setup activities are taking place. DIR and Pilot Agency staff identified as system administrators shall be targeted for participation in this type of training. DIR and Pilot Agency staff involvement is assumed during deliverable review and testing activities.
2. Initial, or Pre-Pilot training shall take place just prior to the release of the Pilot Platform to DIR and Pilot Agencies. A forty (40) hour block of training, eight (8) hours per Pilot Agency, shall be provided as an extension of the overview training that was given during the Jumpstart sessions. Training shall cover the functionality that is available in the Pilot Platform with a focus on how to access and utilize the core analytic and reporting functionality including Power BI and other tools included in the proposed Pilot solution. This shall enable Pilot Agency staff to immediately begin using the platform to address business needs.
3. The training that accompanies each Sprint will be targeted training for Program and Data Analysts to show them how to use new Data Artifacts developed during the Sprint.
4. Training shall be provided at either a specific Pilot Agency or DIR training site in Austin or at the Catapult office in Austin as necessary. Hardware requirements for training will generally be limited to a laptop or PC with Microsoft OS, productivity software, specifically Excel, and a connection to the Internet. Catapult expects to deliver the majority of the training using Catapult's local experts. Some features of the training may require the use of video or remote training utilizing Microsoft experts or Microsoft developed content given the continually improving and evolving nature of the Cortana Analytics Platform. In those instances where video or Skype training tools will be required, the training shall be facilitated by a local Catapult team member.
5. Approximately one hundred and fifty-two (152) hours of training shall be provided as part of the Pilot effort.
 - a. Approximately fifty (50) hours of training will be part of the Jumpstart Workshops and Pre-Pilot or Initial training.
 - Jumpstart Workshops shall be two-day workshops with platform familiarization training generally done on the first day of the workshop. There shall be five (5) planned Jumpstart workshops, one for each Pilot Agency. Participants are expected to attend both days of the workshop for a total of sixteen (16) hours. At least two (2) hours of each workshop will be spent on familiarization training activities.
 - Initial, Pre-Pilot Training shall take place the week prior to Pilot Roll Out. Forty (40) hours shall be allocated for Initial Training. Eight (8) hours of training shall be allocated to each Pilot Agency. Depending on the number of staff attending from each Pilot Agency, some training sessions may be consolidated.
 - b. During the Pilot Sprints, approximately seventy-two (72) hours of training shall be delivered.
 - Eight (8) hours of training shall be allocated for each of the nine (9) Sprints. The training shall cover Data Artifacts developed during the Sprint.

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

- Training time for each Sprint, generally one (1) to two (2) hours, may vary depending on the Data Artifacts developed and functionality utilized by each Pilot Agency.
- c. As part of Sprint 10, Catapult shall conduct approximately thirty (30) hours of review and training
- Four (4) hours of training shall be provided to each Pilot Agency to review the core platform functionality and any Data Artifacts created during the project for a total of twenty (20) additional training hours.
 - An additional ten (10) hours of training shall be conducted to review any functionality included in the DIR BAR Pilot Platform, but not utilized by the Pilot Agency.
6. Additional hands-on or shoulder-to-shoulder training opportunities that shall be made available to Pilot Agency staff identified as technical staff including Pilot Platform Administrators and BI Developers.
7. The number of training participants may vary depending on the type and location of the training. Catapult expects that approximately four to five participants from each Pilot Agency will attend joint workshops and training. Catapult also anticipates that there will also be four (4) to five (5) participants from DIR. In general training and workshops shall be broken out by Pilot Agency to reduce the overall number of participants and lower the ratio of trainees to trainer so that individual instruction and content needs can be met. Catapult shall create and maintain a training log to identify individual participants and document the training that was received.
8. The content of each Sprint Training session shall be dependent on the Data Artifacts produced during that Sprint. At the beginning of each Sprint, the Catapult team will meet with each Pilot Agency and review the backlog of Data Artifacts (models, data sets, reports, dashboards etc.) defined during the initial workshops as well as those added to by the Pilot Agency staff based on further experience with the platform. The Catapult and Pilot Agency team members will prioritize the backlog of items and determine which items will be added to the sprint based on the available capacity. The Catapult BI developers will work with the Pilot Agency staff to build out these artifacts during the sprint.

At the end of each Sprint, there shall be a review of the artifacts that were built. Catapult shall provide a targeted training session to a limited number of participants in each Pilot Agency on the use of the functionality associated with the Data Artifacts built for that Pilot Agency. This will assist the Pilot Agency team members with further testing, use and possibly modification of those artifacts. Catapult shall maintain a matrix of developed artifacts and platform functionality for each Pilot Agency. Catapult and DIR will assist in guiding each of the Pilot Agencies in prioritizing backlog items so that each Pilot Agency is able to experience all of the Pilot Platform features that are relevant to the individual Pilot Agency.

5.9 Assumptions

The following Assumptions are made in defining Pilot Agency staffing commitments:

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

1. There will be a DIR Project Manager and two other DIR team members with skills related to Data Analytics and Reporting.
2. There will be three (3) team members from each of the Pilot Agencies with one of those resources being a lead for the Pilot Agency. The total number of hours for the Agency Pilot Staff can be estimated for each Pilot Agency if they are going to dedicate that number of staff to the Pilot.
3. The staff dedicated to the Pilot will participate in Deliverable Review activities.
4. The staff dedicated to the Pilot will participate in all Workshop activities.
5. The staff dedicated to the Pilot will participate in all Training activities applicable to their role.
6. The staff dedicated to the Pilot will participate in Sprint Planning and Sprint Review activities.
7. At least one of staff from the DIR and Pilot Agencies dedicated to the Pilot will participate at some level in environment configuration and maintenance activities with the Catapult team in order to gain "hands on" experience.
8. At least one staff member from DIR and each Pilot Agency will be dedicated to the Pilot to participate at some level in the Data Artifact Development activities with the Catapult team in order to gain "hands on" experience.
9. At least one staff member from DIR and each Pilot Agency will be dedicated to the Pilot to participate at some level in testing activities with the Catapult team in order to gain "hands on" experience.

6. Glossary

Business Analytics - goes beyond Business Intelligence by using sophisticated modeling techniques to predict future events or discover patterns which cannot be detected otherwise. Advanced Analytics can answer questions including "why is this happening," "what if these trends continue," "what will happen next" (prediction), "what is the best that can happen" (optimization).

Business Intelligence - traditionally focuses on using a consistent set of metrics to measure past performance and guide business planning. Business Intelligence consists of querying, reporting, OLAP (online analytical processing), and can answer questions including "what happened," "how many," and "how often."

7. Period of Performance

The period of performance in which the Vendor will conduct and complete the work associated with this SOW is from the date of the last signature through October 31, 2016.

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

8. Invoices

Vendor shall submit invoices to the DIR's PM. Payments will be made for deliverables accepted in writing by DIR and in accordance with Appendix A, Standard Terms and Conditions for Services, of the DIR Contract DIR-SDD-2039.

9. DIR/Vendor-Furnished Equipment and Work Space

If necessary, upon request, DIR may provide temporary work space at DIR's work location.

10. Point of Contact

All communications must be directed through the following Point of Contacts:

Department of Information Resources (DIR)

Mike Tyler, Project Manager – Enterprise Solution Services
Texas Department of Information Resources
300 W. 15th Street, Suite 1300
Austin, Texas 78701
Office: (512) 463-7082
Email: mike.tyler@dir.texas.gov

Mike Labinski, Contract Manager – Technology Sourcing Office
Texas Department of Information Resources
300 W. 15th Street
Austin, Texas 78701
Office: (512) 463-4692
Email: mike.labinski@dir.texas.gov

Catapult Systems LLC

Sid Atkinson – Delivery Manager
1221 South MoPac Expressway
Three Barton Skyway, Suite 350
Austin, TX 78746
Office: (512) 551-4043
Cell: (512) 619-7796
Email: sidney.atkinson@catapultsystems.com

Michael Kennedy – Director of Public Sector Cloud Strategy
1221 South MoPac Expressway
Three Barton Skyway, Suite 350
Austin, TX 78746
Office: (512) 605-3912
Cell: (512) 917-9707
Email: michael.kennedy@catapultsystems.com

11. Pricing

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

11.1. Deliverables

Pricing for deliverables shall be as indicated below:

Deliverable No.	Deliverable Name	Price
Deliverables as Required by Section 4		
1.	Project Plan/Schedule	\$20,581.27
2.	Base Architecture Documentation	\$36,017.23
3.	BAR Platform Ready for Testing	\$30,614.64
4.	Initial Agency Data Upload Complete	\$15,435.96
5	BAR Lessons Learned and Governance Final Report	\$27,012.92
6	Decommissioning of the BAR platform and Data Purge	\$14,406.89
Training		
7.	Initial Pilot Agency Training	\$13,635.09
8.	Pilot Sprint Support and Training – Sprint 1	\$15,693.22
9.	Pilot Sprint Support and Training – Sprint 2	\$15,693.22
10.	Pilot Sprint Support and Training – Sprint 3	\$15,693.22
11.	Pilot Sprint Support and Training – Sprint 4	\$15,693.22
12.	Pilot Sprint Support and Training – Sprint 5	\$15,693.22
13.	Pilot Sprint Support and Training – Sprint 6	\$15,693.22
14.	Pilot Sprint Support and Training – Sprint 7	\$15,693.22
15.	Pilot Sprint Support and Training – Sprint 8	\$15,693.22
16.	Pilot Sprint Support and Training – Sprint 9	\$15,693.22
Total		\$298,942.98

11.2. Hourly Rates

For the purposes of any additional work that may be determined to be required as specified in Section 3.11, Additional Services, the following hourly rates shall apply for each staff role/function that may be required under this SOW.

Role/Function	Hourly Rate
Cloud Architect	\$200
BI Architect	\$175
Cloud Developer/Engineer	\$175
BI Developer	\$160
BI Analyst	\$160
Cloud Administrator	\$150
Project Manager	\$140

[Remainder of page intentionally left blank]

**Statement of Work (SOW) for
Business Analytics and Reporting Pilot - Technical Services
Texas Department of Information Resources**

This Statement of Work (SOW) is executed to be effective as of the date of last signature. This SOW is submitted under the terms and conditions of the State of Texas DIR Contract DIR-SDD-2039 dated January 15, 2013.

Catapult Systems, LLC.

Authorized By: Signature on File

Printed Name: Jim Booth

Title: General Manager

Date: 4/8/2016

Texas Department of Information Resources

Authorized By: Signature on File

Printed Name: John Hoffman

Title: Chief Technology Officer, DIR

Date: 4/8/2016

Office of General Counsel: DRBrown

Date: 4/8/2016

Texas Department of Information Resources

Authorized By: Signature on File

Printed Name: Grace Windbigler

Title: Director, Technology Sourcing Office

Date: 4/11/2016